



ROCKLER®

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Cove-Cutting Table Saw Jig Instructions

Effective March 2024



Review full manual instructions prior to use for important safety information.
Always check [Rockler.com](https://www.rockler.com) to confirm that you are using the most recent manual version for your product.

GENERAL SAFETY WARNINGS

This product is designed only for specific applications as defined in the instructions and should not be modified or used for any manner not described in these instructions. Use only recommended accessories. Before using the Cove-Cutting Table Saw Jig: **READ, UNDERSTAND and FOLLOW ALL INSTRUCTIONS AND SAFETY WARNINGS. KEEP THESE INSTRUCTIONS READILY AVAILABLE FOR FUTURE REFERENCE.**

- > Always confirm that you are using the most recent version of the instructions and safety warnings for your product (see the instructions link on the product page at Rockler.com).
- > Before using another tool with this product, always read, understand and follow the instructions and safety warnings in the owner's manual for that tool. If you do not have the owner's manual, obtain one from the tool's manufacturer before using it with this product.
- > Before using any chemical with this product, always read, understand and follow all safety warnings and guidelines in the manufacturer's Safety Data Sheet (SDS; formerly called "MSDS"), especially regarding:
 - How to safely use the chemical, including potential hazards and recommended first aid measures;
 - Personal safety equipment required to safely use the chemical (e.g. gloves, eye protection, mask/respirator, etc.);
 - Proper and safe handling, storage and disposal of the chemical.
- > Before using this product, review and verify that all tools to be used with it have safety equipment installed and are in proper working order as defined by the tool's owner's manual.
- > Do not use this product until you have read and are confident you understand:
 - Product Specific Safety Warnings (p. 3);
 - Parts List (p. 4);
 - Assembly (pp. 4-5);
 - Keys to Cutting Coves (p. 6);
 - Preparing Your Stock (p. 6);
 - Setting up the Jig (p. 7);
 - Cutting the Cove (p. 8).
- > The user assumes all risk and responsibility for the proper and safe use of this product and for ensuring product suitability for the intended application.
- > It is the sole responsibility of the purchaser of this product to ensure that anyone you allow to use this product reads and complies with all instructions and safety precautions outlined in this manual prior to use.
- > Follow all standard shop safety practices, including:
 - Keep children and bystanders away from the tool operating area;
 - Do **NOT** use power tools in explosive environments, or in the presence of flammable liquids, fumes or dust;
 - **TURN OFF AND UNPLUG** all power tools **BEFORE** making any adjustments or changing accessories;
 - Remain alert and use good judgment. Do not use this product if you are in any way impaired by medications, alcohol, drugs or fatigue;
 - Keep your work area well lit and clean;
 - Dress appropriately. Secure loose clothing, remove all jewelry and tie up long hair before using this product;
 - **ALWAYS** wear safety glasses, hearing protection and respiratory protection that complies with NIOSH/OSHA/ANSI safety standards;
 - Use dust collection tools and dust face masks to reduce exposure to dust;
 - Use safety equipment such as featherboards, push sticks and push blocks, etc., when appropriate;
 - Maintain proper footing at all times and do not overreach;
 - Do **NOT** force woodworking tools.
- > These warnings and instructions do **NOT** represent the total of all information available regarding tool safety, use and technique. Always seek out opportunities to learn more and improve your skills and knowledge.

⚠ WARNING: Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to www.P65Warnings.ca.gov/wood.

⚠ DANGER

Danger indicates a hazardous situation that, if not avoided, will result in death or serious injury.

⚠ WARNING

Warning indicates a hazardous situation that, if not avoided, could result in death or serious injury.

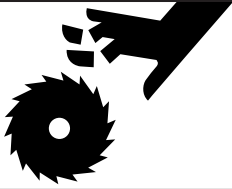
⚠ CAUTION

Caution indicates a hazardous situation that, if not avoided, may result in minor or moderate injury or property damage.

NOTICE

Notice indicates important or helpful information and/or user tips.

PRODUCT SPECIFIC SAFETY WARNINGS



⚠ DANGER

- > To avoid serious injury, keep hands and fingers away from the spinning blade and out of the blade area when using the Cove-Cutting Table Saw Jig. Maintain awareness of spinning blade and safe hand positioning at all times.

⚠ WARNING

- > Turn off and unplug your table saw before adjusting the blade height or installing or adjusting the Cove-Cutting Table Saw Jig.
- > The Cove-Cutting Table Saw Jig **MUST** be secured to the saw with a minimum of **TWO** Miter-Track Clamps. Failure to do so could result in shifting of the fence, potentially leading to dangerous kickback and serious injury.
- > All knobs securing the two Tie Bars and at least two Miter-Track Clamps **MUST** be fully tightened before attempting to cut your workpiece. Failure to do so could result in shifting of the fence, potentially leading to dangerous kickback and serious injury.
- > A push stick must be used to advance the trailing end of a workpiece across the blade when making cuts with the Cove-Cutting Table Saw Jig. **DO NOT USE YOUR FINGERS.** Failure to use a push stick could result in serious personal injury.
- > Table saw blade guards and splitters must be removed when using the Cove-Cutting Table Saw Jig. Remember to reinstall these safety devices before using the table saw for regular cutting operations.
- > Always follow common woodworking safety practices when working at a table saw. Never cut freehand. Failure to follow common woodworking safety practices could result in serious personal injury.

PARTS LIST

Quantity

1	Left Fence	1
2	Right Fence	1
3	Tie Bars	2
4	Long T-Bolts	4
5	Knurled Knobs	8
6	Wedge Bolts	4
7	Miter-Track Clamps	4
8	Star Knobs	4
9	Featherboard Brackets	2
10	Short T-Bolts	2
11	Featherboard	1
12	Carriage Bolts	2
13	Washers	10

Assembly

1. Lay the Left and Right Fences (1 and 2) side by side.
2. Attach the two Tie Bars (3) to the fences, using the Long T-Bolts (4), Knurled Knobs (5) and Washers (13). Make sure the Long T-Bolts fit into the countersunk areas on the bottom of the Fences. **Fig. 1.**
3. Feed the four Wedge Bolts (6) through the Miter-Track Clamps (7), making sure the Wedge Bolts sit in the countersunk areas on the bottom of the Miter-Track Clamps. **Fig. 1.**
4. Now feed the Wedge Bolts (6), through the bottom of the four long slots on the inside edges of the Fences (1 and 2) and attach each one using one Washer (13) and Star Knob (8). **Fig. 1.**

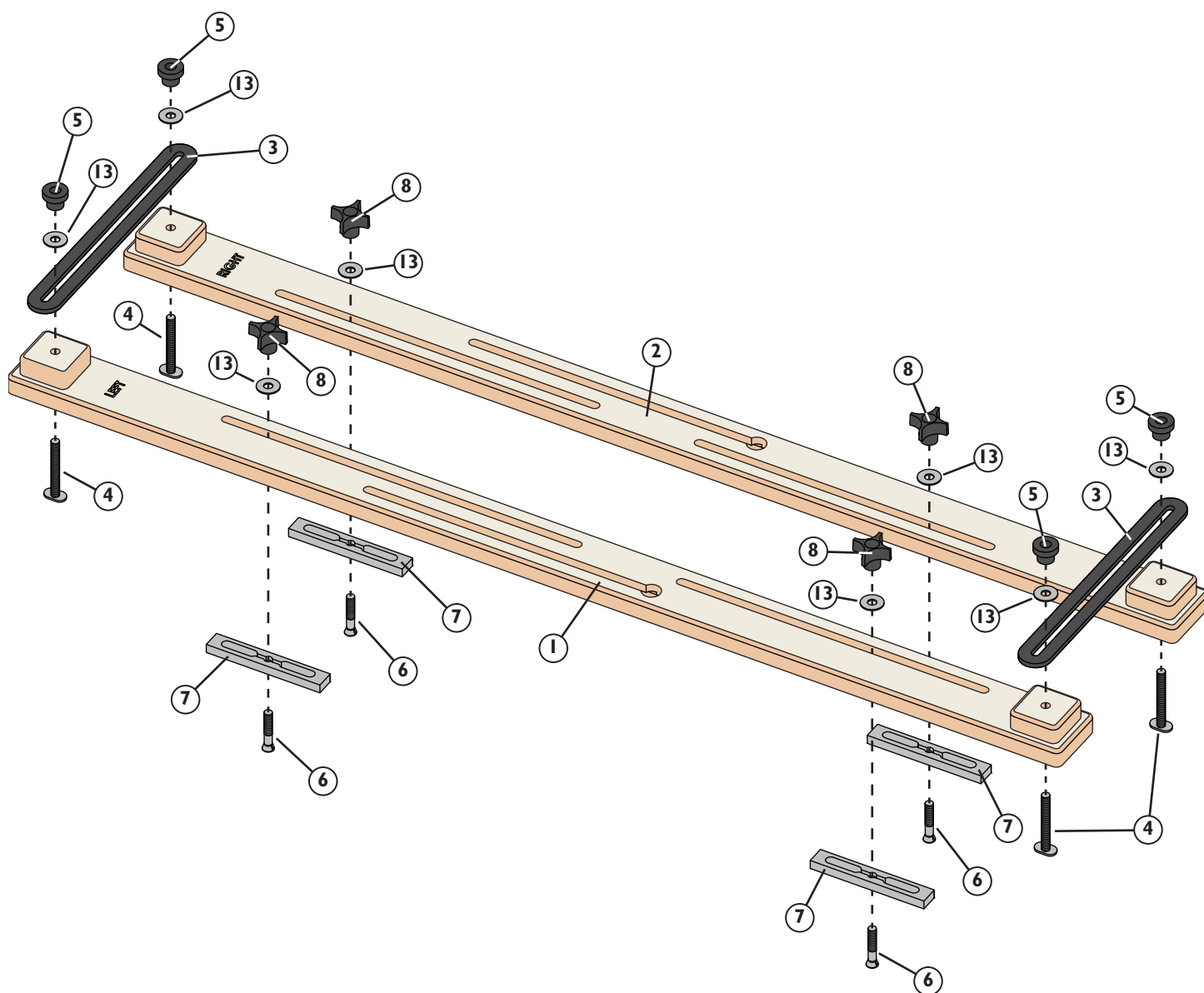


Fig. 1 - Jig Base Assembly

5. Attach the Featherboard Brackets (9) to the Featherboard (11), using the two Carriage Bolts (12) and Knurled Knobs (5). **Fig. 2.**

NOTICE

The opening at the end of the Featherboard Slots in the Fences allows you to install and remove the Featherboard assembly without completely removing the Knurled Knobs.

6. Secure the Featherboard assembly in the slot on the outside edge of one of the Fences, using the two Short T-Bolts (10), Washers (13) and Knurled Knobs (5). Make sure that the Featherboard is oriented so that the tines are pointing toward the back of the saw to help reduce the chance of workpiece kickback. **Fig. 3.**

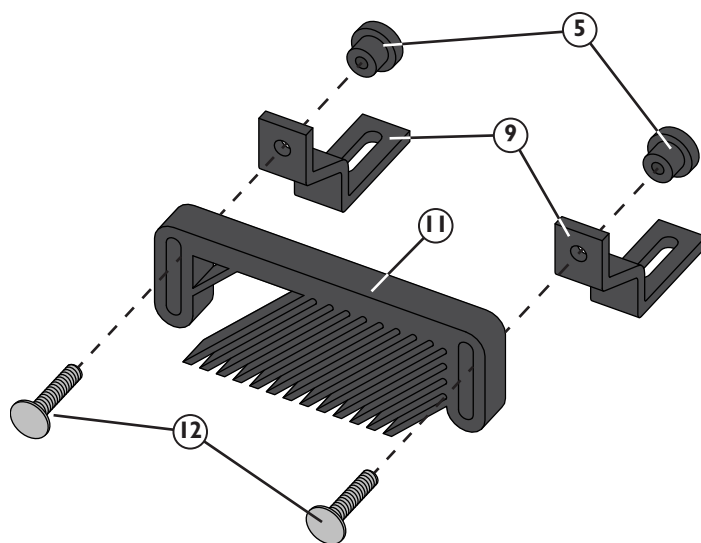


Fig. 2 - Featherboard Assembly

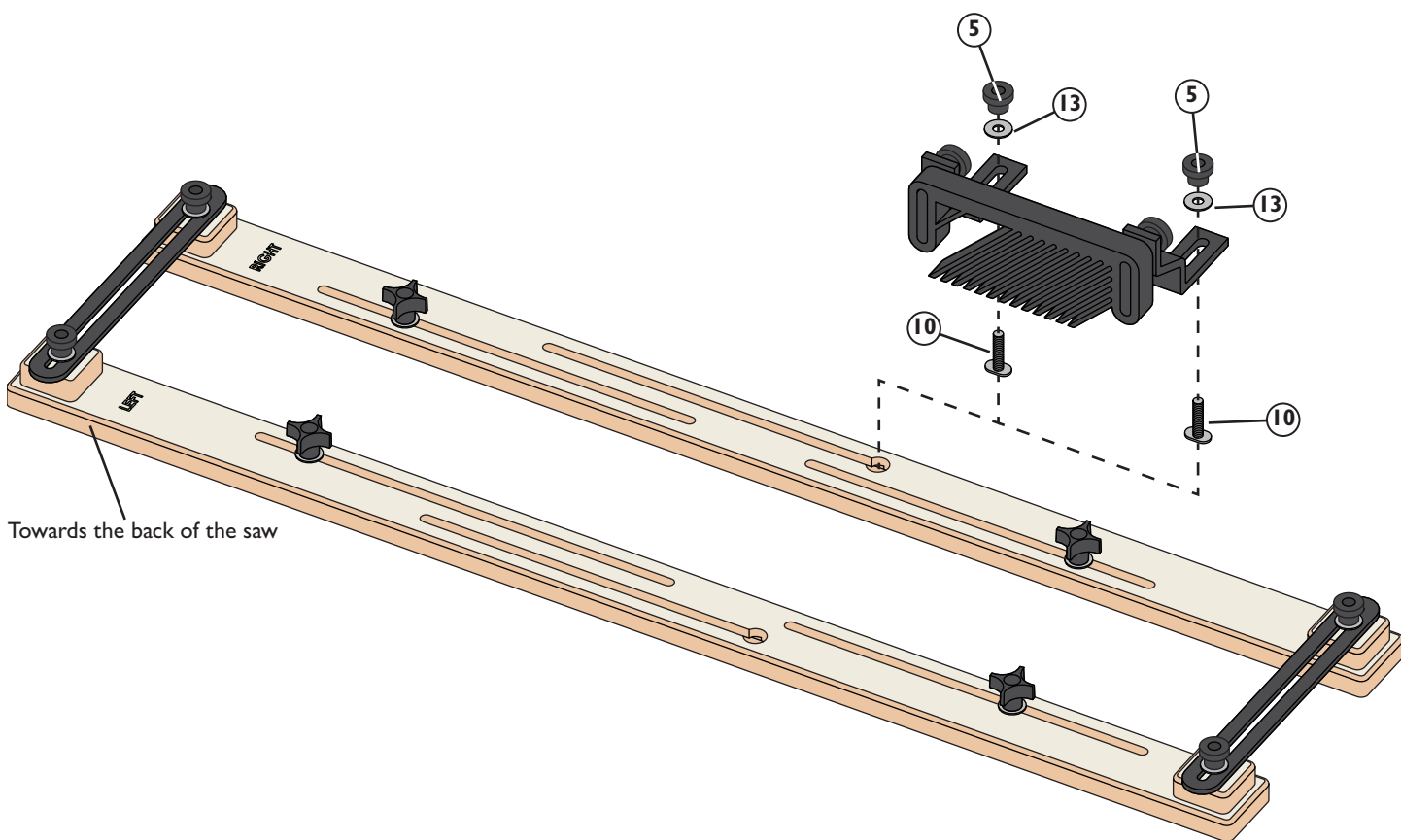


Fig. 3 - Featherboard Attachment



Fig. 4

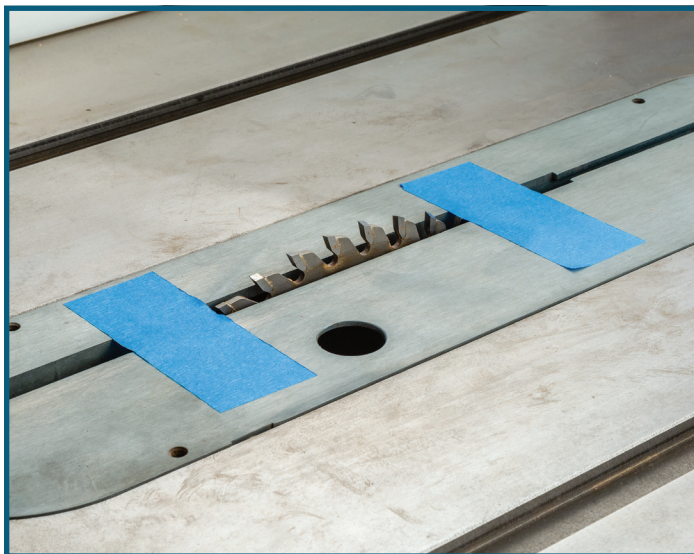


Fig. 5

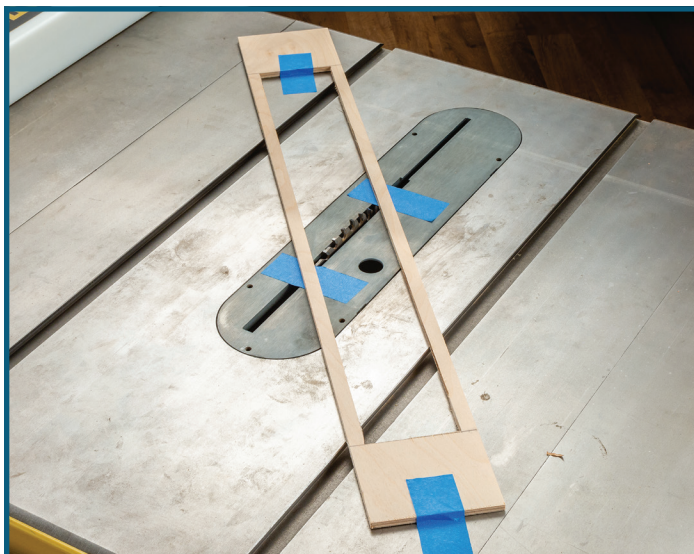


Fig. 6

Keys to Cutting Coves

It's important to understand that the angle at which you feed your workpiece (relative to the blade), also called the angle of approach, and the blade's cutting height are the key variables in determining your final cove:

- The wider the angle at which your stock moves over the blade, the more circular your cove will be.
- The closer your angle of approach is to the plane of the saw blade, the narrower and more elliptical your cove will be.
- The blade height will equal the final depth of your cove.

Preparing Your Stock

THESE WARNINGS PERTAIN TO ALL REMAINING STEPS:

⚠ DANGER

- > To avoid serious injury, keep hands and fingers away from the spinning blade and out of the blade area when using the Cove-Cutting Table Saw Jig. Maintain awareness of spinning blade and safe hand positioning at all times.



⚠ WARNING

- > Turn off and unplug your table saw before adjusting the blade height or installing or adjusting the Cove-Cutting Table Saw Jig.
- > Table saw blade guards and splitters must be removed when using the Cove-Cutting Table Saw Jig. Remember to reinstall these safety devices before using the table saw for regular cutting operations.

It is possible to cut a cove entirely by feeding your stock across the blade of your table saw at an angle in multiple passes, removing no more than 1/16" of material with each pass. However, you will be able to cut your cove faster and more safely if you first remove the bulk of the material with a series of straight cuts at your table saw. You'll adjust the position of the fence and the cutting height of the blade to make the varying cuts.

1. Trace the desired final shape of your cove on the end of the molding stock.
2. Use the traced cove shape as a guide to set the fence distance and blade height for the first relief cut. Set the blade to cut about 1/8" below the line of the curve.
3. Turn on the saw and make the first relief cut.
4. Adjust the fence position and blade height to make the next relief cut.
5. Repeat Steps 2-4 until you have removed the bulk of the material. **Fig. 4.**

Setting up the Jig

⚠ WARNING

- > Turn off and unplug your table saw before adjusting the blade height or installing or adjusting the Cove-Cutting Table Saw Jig.
- > Table saw blade guards and splitters must be removed when using the Cove-Cutting Table Saw Jig. Remember to reinstall these safety devices before using the table saw for regular cutting operations.

1. Set your saw blade to a height equal to the final depth of your cove.
2. Carefully rotate the blade by hand until a tooth at the front of the blade just intersects the plane of the saw table. Fix a strip of masking tape on the throat plate at that point. Then do the same at the back of the blade. **Fig. 5.**
3. To set the angle of the cove-Cutting Table Saw Jig, you need to create a rectangular template with a rectangular inner opening. The template must be at least 2' long – enough to provide good reference edges for the fences of the jig. The outside width must be equal to the width of your molding blank. The width of the inside opening must be equal to the width of your cove.
4. Place the template on the saw table and angle it so that the inside edges line up with the two points at which the saw blade protrudes from the table (indicated by the masking tape). Use tape to temporarily secure the template to the saw table. This will show you exactly where to secure both fences of your Cove Cutting Jig. **Fig. 6.**

⚠ WARNING

The Cove-Cutting Table Saw Jig **MUST** be secured to the saw with a minimum of **TWO** Miter-Track Clamps. Failure to do so could result in shifting of the fence, potentially leading to dangerous kickback and serious injury.

All knobs securing the two Tie Bars and at least two Miter-Track Clamps **MUST** be fully tightened before attempting to cut your workpiece. Failure to do so could result in shifting of the fence, potentially leading to dangerous kickback and serious injury.

5. Position your Cove Cutting Jig so that it straddles the template, with the fences snug to the outside edges of the template.
 - **If you are cutting a wider cove**, the front-right and front-left Miter-Track Clamps should both sit in the right miter track of your table saw, and the rear-right and rear-left miter-track clamps should both sit in the left miter track. **Fig. 7.**
 - **If you are cutting a very narrow cove**, you may have to remove the front-left and rear-right Miter-Track Clamps from the miter tracks to allow for the necessary angle. Remove the unused Miter-Track Clamps not in use or slide them against the saw table and tighten them down. **Fig. 8.**

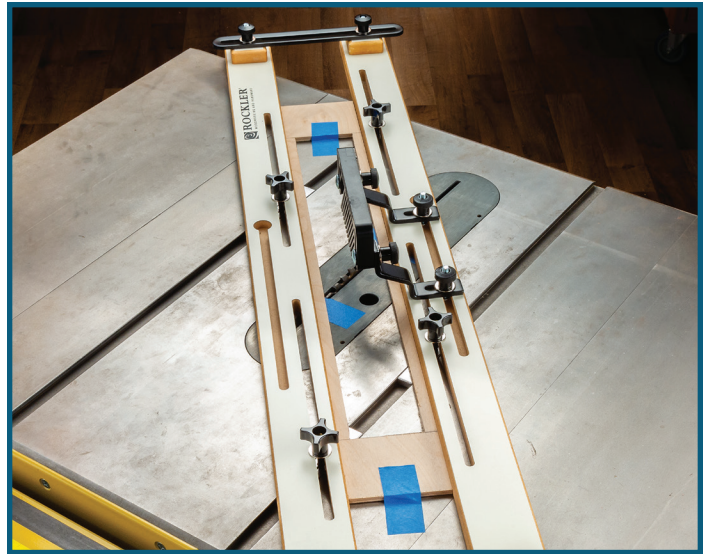


Fig. 7



Fig. 8

6. After making sure **BOTH** fences are snug against the template, fully tighten the knobs on all Miter-Track Clamps being used. Also fully tighten all four Knurled Knobs on the Tie Bars at each end of the jig.
7. Position the Featherboard so it is centered over the sawblade and set slightly below the thickness of your workpiece. Tighten all fastening knobs.
8. Remove the template from between the Fences of the jig.
9. With the saw still turned off, double-check the setup by raising the blade to the proper height and sliding the workpiece with the cove pattern on the end between the fences. When you sight from behind the saw, the profile of the sawblade should match the pattern of your cove.



Fig. 9

Cutting the Cove

THESE WARNINGS PERTAIN TO ALL REMAINING STEPS:

DANGER

- > To avoid serious injury, keep hands and fingers away from the spinning blade and out of the blade area when using the Cove-Cutting Table Saw Jig. Maintain awareness of spinning blade and safe hand positioning at all time.



WARNING

- > Turn off and unplug your table saw before adjusting the blade height or installing or adjusting the Cove-Cutting Table Saw Jig.
- > A push stick must be used to advance the trailing end of a workpiece across the blade when making cuts with the Cove-Cutting Table Saw Jig. **DO NOT USE YOUR FINGERS.** Failure to use a push stick could result in serious personal injury.

1. Lower the blade all the way and slide your workpiece between the fences, making sure it slides smoothly and without any play. Once you are sure the fences are properly adjusted, raise the blade so it will take about 1/16" off your prepared stock.
2. Plug in and turn on the saw. Using a push stick, push the workpiece slowly over the sawblade. If the workpiece starts to burn, move it a little faster.
3. After completing the first pass, turn off the saw, raise the blade 1/16" and make the next pass. Repeat this process until you are within 1/32" of the final arc of the cove (you also should be close to the final width of the cove).
4. For the final pass, take off no more than 1/32" and feed the workpiece very slowly. **Fig. 9.**
5. Once you're done cutting the cove at your table saw, use a curved cabinet scraper and sandpaper to smooth out any saw marks.

Check Rockler.com for updates. If you have further questions, please contact our Technical Support Department at 1-800-260-9663 or support@rockler.com